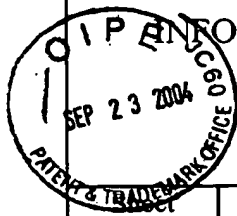


9/23/04



INFORMATION DISCLOSURE CITATION

PTO-1449

Complete If Known

Application Number	10/684,618
Filing Date	October 13, 2003
First Named Inventor	Jared L. Zerbe
Art Unit	2661
Examiner Name	To be assigned
Attorney Docket Number	60809-0138

1 of 2

U.S. PATENT DOCUMENTS

Examiner Initials	Document Number Number - Kind Code ¹	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
AN	4,481,625	11-06-1984	Roberts et al.			
	4,847,867	07-11-1989	Nasu et al.			
	5,254,883	10-19-1993	Horowitz et al.			
	5,355,391	10-11-1994	Horowitz et al.			
	5,432,823	07-11-1995	Gasbarro et al.			
	5,485,490	01-16-1996	Leung et al.			
	5,513,327	04-30-1996	Farmwald et al.			
	5,554,945	09-10-1996	Lee et al.			
	5,614,855	03-25-1997	Lee et al.			
	5,619,158	04-08-1997	Casal et al.			
	5,724,392	03-03-1998	Klimek et al.			
	5,757,786	05-26-1998	Joo, Hwang-Yong			
	5,889,824	03-30-1999	Ueda, Hideki			
	6,049,846	04-11-2000	Farmwald et al.			
	6,232,806 B1	05-15-2001	Woeste et al.			
	6,233,294 B1	05-15-2001	Bowers et al.			
	6,236,623 B1	05-22-2001	Read et al.			
	6,426,984 B1	07-30-2002	Perino et al.			
AN	2001/0047450 A1	11-29-2001	Gillingham et al.			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Foreign Patent Document Country Code ² - Number ³ - Kind Code ⁴ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Class	Subclass	Translation	
						Yes	No
AN	JP 63276935 (abstract)	11-15-1988	Hitoshi, T.			x	
AN	JP 4117709 (abstract)	04-17-1992	Yukiaki, H.			x	
AN	JP 387907 (abstract)	04-12-1991	Mitsutoshi, S.			x	

Examiner Signature		Date Considered	11/17/04
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				Application Number	10/684,618
				Filing Date	October 13, 2003
				First Named Inventor	Jared L. Zerbe
				Art Unit	2661
				Examiner Name	To be assigned
Sheet	2	of	2	Attorney Docket Number	60809-0138

OTHER NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
	Chang et al., "A 2GB/s/pin CMOS Asymmetric Serial Link", <i>Computer Science Laboratory, Stanford University</i> .
	Dally and Poulton, "Digital Systems Engineering", pp. 361-366 (1998).
	Designline, (Micron Technology Inc.), 8(3):1-24 (3Q99)
	Efendovich et al., "Multifrequency Zero-Jitter Delayed Locked Loop", IEEE, <i>J. Solid-State Circuit</i> , vol. 29, No. 1, Jan. 1994.
	Intel, "440BX AGPset: 82443BX Host Bridge/Controller Datasheet", (April 1998).
	Nakase et al., "Source-Synchronization and Timing Vernier Techniques for 1.2-GB/s SLDRAM Interface", <i>IEEE Journal of Solid-State Circuits</i> , 34(4):494-501 (April 1999).
	Poulton, "Signaling in High-Performance Memory Systems", <i>ISSCC</i> (1999).
	SLDRAM Consortium, "400 Mb/s/pin SLDRAM", Advance Data Sheet, pp. 1-59 (1997 Draft).
	Sidiropoulos, S. "A Semidigital Dual Delay-Locked Loop", IEEE, <i>J. Solid-State Circuits</i> , vol. 32, No. 11, Nov. 1997.
	Song et al., "NRZ Timing Recovery Technique for Band-Limited Channels", <i>IEEE Journal of Solid-State Circuits</i> , 32(4):514-520 (April 1997)

Examiner Signature		Date Considered	
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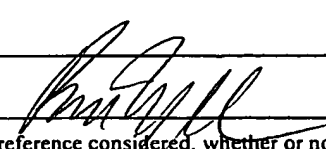
10/12/04

INFORMATION DISCLOSURE CITATION PTO-1449			<i>Complete If Known</i>	
			Application Number	10/684,618
			Filing Date	October 13, 2003
			First Named Inventor	Jared L. Zerbe
			Art Unit	2661
			Examiner Name	To be assigned
Sheet	1	of	Attorney Docket Number	60809-0138

U.S. PATENT DOCUMENTS						
Examiner Initials	Document Number Number - Kind Code ¹	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
AN	5,778,419	07-07-1998	Hansen et al.			

FOREIGN PATENT DOCUMENTS							
Examiner Initials	Foreign Patent Document Country Code ² - Number ³ - Kind Code ⁴ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Class	Subclass	Translation	
						Yes	No
						x	
						x	
						x	

OTHER NON PATENT LITERATURE DOCUMENTS	
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MAN	GABARA, THADDEUS J., "Digitally Adjustable Resistors in CMOS for High-Performance Applications", <i>IEEE J. Solid-State Circuits</i> , vol. 27, no. 8, August 1992.

Examiner Signature		Date Considered	11/17/04
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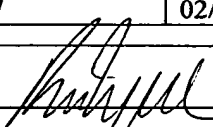
¹ See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ² Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

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10/13/03

INFORMATION DISCLOSURE CITATION PTO-1449				Complete If Known	
				Application Number	To be assigned
				Filing Date	October 13, 2003
				First Named Inventor	Jared LeVan Zerbe et al.
				Art Unit	2185
Examiner Name	Nitin C. Patel				
Sheet	1	of	2	Attorney Docket Number	9797-0138-999

U.S. PATENT DOCUMENTS						
Examiner Initials	Document Number Number - Kind Code ¹	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Class	Subclass	Filing Date if Appropriate
/N	5,376,833	12/1994	Chioupek	327	110	
	5,489,862	02/1996	Risinger et al.	327	108	
	5,498,990	03/1996	Leung et al.	327	323	
	5,606,717	02/1997	Farmwald et al.	395	856	
	5,684,421	11/04/1997	Chapman et al.			
	5,831,929	11/03/1998	Manning			
	5,838,177	11/17/1998	Keeth			
	5,852,378	12/22/1998	Keeth			
	5,860,080	01/12/1999	James et al.			
	5,870,347	02/09/1999	Keeth et al.			
	5,872,736	02/16/1999	Keeth			
	5,910,920	01/08/1999	Keeth			
	5,920,518	07/06/1999	Harrison et al.			
	5,926,034	07/20/1999	Seyyedy			
	5,935,263	08/10/1999	Keeth et al.			
	5,940,608	08/17/1999	Manning			
	5,940,609	08/17/1999	Harrison			
	5,946,244	08/31/1999	Manning			
	5,946,260	08/31/1999	Manning			
	5,949,254	09/07/1999	Keeth			
	5,959,929	09/28/1999	Cowles et al.			
	5,963,502	10/05/1999	Watanabe et al.			
	5,986,955	11/16/1999	Siek et al.			
	5,996,043	11/30/1999	Manning			
	6,000,022	12/07/1999	Manning			
	6,009,487	12/1999	Davis et al.	710	105	
	6,011,732	01/04/2000	Harrison et al.			
	6,016,282	01/18/2000	Keeth			
	6,014,759	01/11/2000	Manning			
	6,026,050	02/15/2000	Baker et al.			
	6,026,051	02/15/2000	Keeth et al.			
	6,029,250	02/22/2000	Keeth			
	6,029,252	02/22/2000	Manning			
/N	6,031,787	02/29/2000	Jeddeloh			

Examiner Signature		Date Considered	11/16/04
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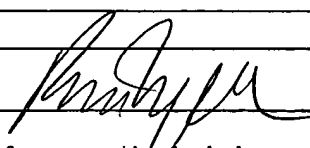
10/13/03

INFORMATION DISCLOSURE CITATION PTO-1449				Complete If Known		
				Application Number	To be assigned	
				Filing Date	October 13, 2003	
				First Named Inventor	Jared LeVan Zerbe et al.	
				Art Unit	2185	
Examiner Name	Nitin C. Patel					
Attorney Docket Number	9797-0138-999					
Sheet	2	of	2			

13A2	6,032,220	02/29/2000	Martin et al.			
	6,032,274	02/29/2000	Manning			
	6,034,878	03/07/2000	Osaka et al.			
	6,047,248	04/2000	Georgious et al.	702	132	
	6,321,282 B1	11/2002	Horowitz et al.	710	104	
	6,094,704	07/25/2000	Martin et al.	711	105	06/17/1997
	6,094,727	07/25/2000	Manning	713	400	06/23/1998
	6,101,197	08/08/2000	Keeth et al.	370	517	09/18/1997
	6,101,612	08/08/2000	Jeddeloh	713	401	10/30/1998
	6,108,795	08/22/2000	Jeddeloh	713	401	10/30/1998
14A2	6,462,591 B2	10/08/2002	Garrett, Jr. et al.	327	112	06/14/2001

FOREIGN PATENT DOCUMENTS							
Examiner Initials	Foreign Patent Document Country Code ² - Number ³ - Kind Code ⁴ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Class	Subclass	Translation	
						Yes	No
						x	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
14A2	Chang et al., "A 2GB/s/pin CMOS Asymmetric Serial Link", <i>Computer Science Laboratory, Stanford University</i>
14A2	Dally and Poulton, "Digital Systems Engineering", pp. 361-366 (1998)
14A2	Designline, (Micron Technology Inc.), 8(3):1-24 (3Q99)
14A2	Intel, "440BX AGPset: 82443BX Host Bridge/Controller Datasheet", (April 1998)
14A2	Nakase et al., "Source-Synchronization and Timing Vernier Techniques for 1.2-GB/s SDRAM Interface", <i>IEEE Journal of Solid-State Circuits</i> , 34(4):494-501 (April 1999)
14A2	Poulton, "Signaling in High-Performance Memory Systems", <i>ISSCC</i> (1999)
14A2	SDRAM Consortium, "400 Mb/s/pin SDRAM", Advance Data Sheet, pp. 1-59 (1997 Draft)
14A2	Song et al., "NRZ Timing Recovery Technique for Band-Limited Channels", <i>IEEE Journal of Solid-State Circuits</i> , 32(4):514-520 (April 1997)

Examiner Signature		Date Considered	11/16/04
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